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|-------------------------------|------------------------|---------------------|--|
| <b>Notice of Allowability</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                               | 10/681,222             | WEI ET AL.          |  |
|                               | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                               | Maryam Monshipouri     | 1652                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_\_.
2. ☒ The allowed claim(s) is/are 24-27 and 29-36.
3. ☒ The drawings filed on 31 October 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                 |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>7/13/02</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                        |
|   | 9. <input type="checkbox"/> Other _____.  |

An **Examiner's Amendment** to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this Examiner's Amendment was given in a telephone interview with , Mr. Justin D. Karjala on 7/13/2004.

#### **Examiner's Amendment to the Claims**

##### **Cancel claims 28, 37-38.**

In claim 24, line 4, delete " (a) a nucleotide sequence that encodes a polypeptide comprising an amino acid sequence having at least 95% sequence identity to SEQ ID NO:2; ".

In claim 24, line 6, delete (b), and substitute therefor --- (a) ---.

In claim 24, line 8, , delete (c), and substitute therefor --- (b) ---.

In claim 24, line 10, , delete (d), and substitute therefor --- (c) ---.

In claim 24, line 11, after "sequence of", delete "(a), (b), or (c) " and substitute therefor --  
- (a) or (b) ---.

In claim 25, line 4, delete " (a) a transcript or cDNA sequence that encodes a polypeptide comprising an amino acid sequence having at least 95% sequence identity to SEQ ID NO:2; ".

In claim 25, , line 6, delete (b), and substitute therefor --- (a) ---.

In claim 25, line 7, after "NO:1" insert --- and ---.

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In claim 25, line 8, , delete“(c) a nucleotide sequence having at least 95% sequence identity to nucleotides 114-2546 of SEQ ID NO:1; and ”.

In claim 25, line 10, delete “ (c )” and substitute therefor --- (b) ---.

In claim 25, line 11, delete : “ (a), (b), or (c ) ” and substitute therefor --- (a) ---.

In line 27, line 2, after “said nucleic acid molecule”, delete “comprises” and substitute therefor --- consists of ---.

In claim 33, after “any one of the claims”, delete “ 24-35” and substitute therefor --- 24-27 and 29-32 ---.

#### **Examiner's Amendments to the Specification**

In page 1, underneath the title, insert ---- This application is a Divisional of U.S.

Application No. 10/273,992 filed 10/21/2002 now U.S. Patent No. 6,664,093 issued 12/16/2002, which is Divisional of U.S. Application No. 09/819,989, filed 3/29/2001 now U.S. Patent No. 6,482,629 issued 11/19/2002. ---.

In page 7, line 17, delete “FIGURE 1 provides” and substitute therefor --- Figures 1A-1B provide ---.

In page 7, line 23, delete “FIGURE 2 provides” and substitute therefor --- Figures 2A-2D provide ---.

In page 7, line 27, delete “FIGURE 3 provides” and substitute therefor --- Figures 3A-3I provide ---.

The following is an **Examiner's Statement of Reasons for Allowance:**

Claims 14-27, 29-36 are directed to isolated nucleic acid molecules encoding a zinc metalloprotease consisting of a DNA sequence having at least 95% sequence

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identity to SEQ ID NO:1, or residues 114-2546 of SEQ ID NO:1 or nucleic acid molecules comprising a DNA sequence having 95% sequence identity to SEQ ID NO:1 , vectors and host cells comprising said nucleic acid molecules and methods of expressing said nucleic acid molecules.

Claimed nucleic acid molecules are free of prior art. Further, the prior art does not teach or suggest preparing such specifically claimed DNA molecules. Hence, said molecules are also non-obvious. Since claimed molecules are both novel and non-obvious, vectors and host cells comprising said molecules and methods of expressing said molecules are also novel and non-obvious.

**Claims 14-27, 29-36 are allowed.**

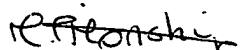
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maryam Monshipouri whose telephone number is (571) 272-0932. The examiner can normally be reached on 7:00 a.m to 4:30 p.m. except for alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnanthapu Achutamurthy can be reached on (571) 272-0928. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Maryam Monshipouri Ph.D.

Primary Examiner

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